

REMARKS

Summary of the Office Action

Claims 14 – 18 stand objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form to include all the features of the base and any intervening claim.

Claims 1 – 4, 6, 7, 10, 11, and 19 – 24 stand rejected under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,133,717 ("Chopin").

Summary of the Response to the Office Action

Claims 5, 6, 8, 9, 12 through 14, 21, and 24 have been cancelled without prejudice or disclaimer to the subject matter contained therein, and claims 1, 10, 11, 15-19, and 22 have been amended. Applicant respectfully submits that these amendments introduce no new matter within the meaning of 35 U.S.C. §132.

Applicant places claims 10, 11, and 15 – 18 in condition for allowance by amending claim 10 to incorporate the features of allowable claim 14, canceling claim 14, and amending claims 15 – 18 to depend from claim 10.

Applicant amends claim 1 to incorporate the features of canceled claim 21, except for the "at least one assembly element integral with the body for attaching the bone-fixing member" of canceled claim 21, which was not incorporated into amended claim 1. Claims which depended directly on Claim 1 have been amended, where appropriate, to preserve proper dependency. Claims which depended on claim 21 have been amended to depend from Claim 1.

Thus, claims 1 – 4, 7, 10, 11, 15 – 20, 22, and 23 are pending, with claims 1 and 10 being independent. For at least these reasons, entry of the present Amendment is therefore respectfully requested. Accordingly, Applicant requests reconsideration and timely withdrawal of the pending rejections for at least the reasons discussed below.

Claims 10, 11, and 15 – 18

Applicant thanks the Examiner for indicating that claims 14 – 18 would be allowable if rewritten in independent form to include all the features of the base and any intervening claim. Applicant hereby places claims 10, 11, and 15 – 18 in condition for allowance by amending claim 10 to incorporate the features of allowable claim 14, canceling claim 14, and amending claims 15 – 18 to depend from amended claim 10. Applicant submits that claims 10, 11, and 15 – 18 are in condition for allowance, and requests that the rejections of these claims be withdrawn.

Claims 1 – 4, 7, 19, 20, 22, and 23

Applicant respectfully traverses the rejections of pending claims 1 – 4, 7, 19, 20, 22, and 23 under 35 U.S.C. § 102(b) as allegedly anticipated by U.S. Patent No. 5,133,717 (“Chopin”). “Anticipation requires the disclosure in a single prior art reference of each element of the claim under consideration.” *W.L. Gore & Assocs. V. Garlock*, 721 F.2d 1540, 220 USPQ 303 (Fed. Cir. 1983), *cert. denied*, 469 U.S. 851 (1984). Further, “when evaluating the scope of a claim, every limitation in the claim must be considered. U.S.P.T.O. personnel may not dissect a claimed invention into

discrete elements and then evaluate the elements in isolation. Instead, the claim as a whole must be considered.” *U.S.P.T.O. Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility*, page 9, October 26, 2005. As the Federal Circuit stated, “[a]nticipation requires the presence in a single prior art reference disclosure of each and every element of the claimed invention, arranged as in the claim.” *Lindemann Maschinenfabrik GmbH v. American Hoist & Derrick Co.*, 730 F.2d 1452, 221 USPQ 481, 485 (Fed. Cir. 1984) (citing *Connell v. Sears, Roebuck & Co.*, 722 F.2d 1542, 220 USPQ 193 (Fed. Cir. 1983)).

Amended claim 1 recites in part “a saddle clamp for mounting on a vertebra and for carrying a bone-fixing member in a spinal fusion operation, the saddle clamp having a rigid body with a contact surface for contacting the vertebra and comprising a saddle surface and an arcuate surface.” Amended claim 1 further recites that:

- the saddle surface is defined between a first down-turned arch and an up-turned arch lying in transverse planes and having a common point;
- the arcuate surface is defined by a second down-turned arch and merges smoothly with the saddle surface; and
- top-most points of the arcuate surface are higher than the first down-turned arch.

With the features recited in amended claim 1, the arch defining the arcuate surface is distinct from that of the saddle surface. This is evident from the language of the claim, which recites that the saddle surface is defined by a first down-turned arch and an up-turned arch, while the arcuate surface is defined by a second down-turned arch. This is also shown by using different ordinal numbers to designate the

first and second down-turned arches, indicating that they are separate from one another. The up-turned arch, by virtue of its orientation, is distinct from both of the down-turned arches. Thus, the three arches recited in claim 1 are mutually exclusive of one another.

The Office Action alleges at page 3 that Chopin surface 39 discloses the contact surface recited in claim 1. The Office Action also alleges that the underside of Chopin element 23 and central passageway respective constitute a saddle surface having transverse first and second arches, and that Chopin element 25 constitutes a second arcuate surface. Applicant disagrees, and respectfully submits that for at least the reasons discussed below, none of the embodiments disclosed in Chopin disclose the features recited in amended claim 1.

Applicant respectfully submits that Chopin surface 39 cannot be the saddle clamp recited in amended claim 1. As stated on page 3 of the Office Action, the Examiner considers Chopin surface 39 to be the "contact surface" recited in claim 1. Chopin surface 39, however, is specifically described as being "advantageously hemispherical" col. 3, lines 55 – 56 (emphasis added). As a hemisphere, this surface is not shown to have, and cannot have "a first down-turned arch and an up-turned arch lying in transverse planes and having a common point" and "a second down-turned arch [that] merges smoothly with the saddle surface," as recited in claim 1.

Applicant also disagrees with the Office Action characterization of Chopin element 23 as part of the saddle recited in claim 1. Applicant respectfully notes that

Chopin does not refer to an “underside” thereof, nor does Chopin employ any language which is instructive as to which surface of the saddle is the “underside.” If element 23 were part of the saddle recited in claim 1 (which Applicant submits it is not), element 23 would be mounted in a position such that the side which is placed against the sacrum is opposite the portion visible in Chopin Fig. 4. Therefore, the portion not visible would most reasonably constitute the “underside” of the saddle. However, since the only guidance provided by Chopin as to the particular shape of surface 23 is that it is hemispherical, Applicant respectfully submits that the underside of element 23 fails to disclose the saddle surface recited in claim 1 as, by definition, neither a hemisphere nor a purported “underside” of a hemisphere disclose the “first down-turned arch and an up-turned arch lying in transverse planes and having a common point” recited in amended claim 1.

Applicant also disagrees with the assertion on page 3 of the Office Action that Chopin element 25 discloses the second arcuate surface recited in amended claim 1. Claim 1 recites that the arcuate surface is part of a contact surface “for contacting a vertebra.” This feature conveys to a person of ordinary skill in the art that the shape of the contact surface is suitable for contacting a vertebra. Chopin, in contrast, discloses that surface 25 is in the form of channels designed to receive a rod (such as rod 8 illustrated in Chopin Fig. 7), which cannot reasonably be construed as a contact surface suitable “for contacting a vertebra.” Thus, Chopin element 25 does not disclose the second arcuate surface recited in amended claim 1.

Notwithstanding the above, even if the orientation of the saddle disclosed in Chopin were interpreted as the opposite of what is discussed above (i.e., “underside” discussed above were instead construed as the portion visible in Fig. 4), amended claim 1 is still allowable for at least the following reasons.

As discussed above, claim 1 recites that “the saddle surface [comprises a] down-turned arch and an up-turned arch lying in transverse planes and having a common point.” In contrast, the visible portion of the saddle disclosed in Chopin comprises a series of arches which are all turned in the same direction (all up-turned or all down-turned, depending on the preferred orientation thereof). Thus, even with this interpretation, Chopin fails at least to disclose the features of the saddle surface recited in amended claim 1.

Claim 1 also recites that “the arcuate surface . . . merges smoothly with the saddle surface.” In addition, as noted above, the arch defining the arcuate surface is distinct from that defining the saddle surface. Unlike the saddle recited in claim 1, the Chopin saddle lacks two surfaces, each defined by a separate arch, which merge smoothly into one another. Thus, Chopin also fails to disclose this additional feature of amended claim 1.

Claim 1 further recites that “the arcuate surface is defined by a . . . down-turned arch,” and that “top-most points [thereof] are higher than the first down-turned arch.” Irrespective of which direction is selected as being “up”, claim 1 recites that the arcuate surface is defined by an arch extending in one direction, and that points

thereof which extend the most in the opposite direction do so more than does the saddle surface. Applicant disagrees with the assertion on page 3 that Chopin channel 25 of Chopin corresponds to the arcuate surface of amended Claim 1. If channel 25 were defined as an upturned arch (using its orientation as illustrated in Fig. 4 as a reference) to construe it to be the arch of claim 1, its lowermost point would have to extend downwardly more than the saddle surface. However, the U-shaped bodies and channels disclosed in Chopin fail to disclose such a feature. Instead, the lowermost points of channel 25 do not extend more downwardly than any other arch-defined surface of Chopin. In contrast to the claimed subject matter, as seen in Chopin Fig. 4, the “top” edges and “arches” 25 and 23 are level with one another. Thus, for this additional reason, Chopin also fails to disclose the arcuate surface recited in amended claim 1.

Accordingly, Applicant submits that Chopin fails to disclose each and every feature recited in independent claim 1 as required for anticipation under 35 U.S.C. §102. Thus, Applicant respectfully submits that amended claim 1 is allowable. Applicant further submits that claims 2 – 4, 7, 19, 20, 22, and 23 are also allowable at least because of their dependency from allowable claim 1. Since none of the other art of record, whether taken alone or in any combination, discloses or suggests all of the features of the claimed subject matter, Applicant respectfully requests withdrawal of the rejections of claims 1 – 4, 7, 19, 20, 22, and 23 under 35 U.S.C. §102(b).

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CONCLUSION

Applicant believes that a full and complete response has been made to the pending Official Action and respectfully submits that all of the stated grounds for rejection have been overcome or rendered moot. Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact Applicant's undersigned representative at the number below to expedite prosecution.

If an extension of time is necessary to prevent abandonment of this application and is not filed herewith, then such extension of time is hereby petitioned for under 37 C.F.R. §1.136(a). Any fees required for further extensions of time and any fees for the net addition of Claims are hereby authorized to be charged to our Deposit Account No. 14-0112. Prompt and favorable consideration of this Reply is respectfully requested.

Respectfully submitted,
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